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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/627,841	07/28/2000	Huiling Zhu	MEW1855/055	1077

7590
Owen J. Meegan
65 Dearborn Street
Salem, MA 01970

07/03/2003

EXAMINER

PATEL, ASHOK

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/627,841

Applicant(s)

ZHU ET AL.

Examiner

Ashok Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 0319.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 6 is/are allowed.
- 6) ☐ Claim(s) 1, 5 and 7-13 is/are rejected.
- 7) ☐ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. Applicant's arguments filed 03/19/2003 have been fully considered but they are not persuasive.
2. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "and/or" renders claims 6 and 7 vague since it remains unclear as to whether the claims refer to the "MgI₂ and MgBr₂" or "'MgI₂ or MgBr₂'".

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

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art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1 and 9-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Furmidge et al (U.S.P. 3,867,665) or Ohyama et al (U.S.P. 4,745,335) or Ohyama (U.S.P. 4,769,576), each applied individually.

Each of these prior art references cites a metal halide lamp as claimed by applicant including MgI_2 or $MgBr_2$ as a fill material besides mercury and rare gas fill.

Although none of these prior art references disclose or teach an (outer) envelope, the envelope is inherently provided for optimizing: additional protection, temperature and pressure etc.

Alternatively providing an (outer) envelope would have been obvious to one of ordinary skill in the art for optimizing: additional protection, temperature and pressure etc.

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6. Claims 1, 5, 7-9 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Caruso (U.S.P. 5,698,948).

Each of these prior art references cites a metal halide lamp as claimed by applicant including MgI_2 or MgBr_2 as a fill material besides mercury and rare gas fill.

Although none of these prior art references discloses or teach an (outer) envelope, the envelope is inherently provided for optimizing: additional protection, temperature and pressure etc.

Alternatively providing an (outer) envelope would have been obvious to one of ordinary skill in the art for optimizing: additional protection, temperature and pressure etc.

Caruso further discloses the amp including: Na, at least one lanthanide element (col. 1, lines 30-32) as claimed by applicant. The amount of fill material is such that it satisfies applicant's claimed molar weight range.

7. Claims 1, 9 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ohyama et al (U.S.P. 5,394,059).

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Each of these prior art references cites a metal halide lamp as claimed by applicant including MgI_2 or $MgBr_2$ as a fill material besides mercury and rare gas fill.

Although none of these prior art references disclose or teach an (outer) envelope, the envelope is inherently provided for optimizing: additional protection, temperature and pressure etc.

Alternatively providing an (outer) envelope would have been obvious to one of ordinary skill in the art for optimizing: additional protection, temperature and pressure etc.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furmidge et al (U.S.P. 3,867,665) or Ohyama et al (U.S.P. 4,745,335) or Ohyama (U.S.P. 4,769,576) or Caruso (U.S.P. 5,698,948) or Ohyama et al (U.S.P. 5,394,059), each applied individually.

None of these prior art references discloses the lamp envelope having pressure in a certain range as claimed by applicant. However, it would have been obvious to one of ordinary skill in the art to provide the outer envelope with a suitable pressure for optimizing the operating characteristics of the lamp with respect to selection of discharge pressure, fill material, operating voltage etc.

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9. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the prior art of record disclose applicant's claimed lamp, as recited in claims 3 and 4, which further includes molar quantities of the claimed halides.

10. Claim 6 is in condition for allowance since prior art of the record does not disclose applicant's claimed lamp as fully and specifically recited in claim 6.

11. The Examiner responds to applicant's arguments as follows.

With respect to 35 U.S.C. 112, second paragraph rejection, applicant argues that use of "and/or" term merely replaces designation of magnesium halide in use in the claims. As mentioned in corresponding rejection, it cannot be determined as to whether the claims refer to the "MgI₂ and MgBr₂" or "'MgI₂ or MgBr₂'". The term "and/or" causes vagueness.

Applicant argues, at page 2, middle paragraph of his response filed on 03/19/2003, that prior art lamp of Furmidge et

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al ('665) and Ohyama ('576) was for an UV radiation source for photochemical reaction application with a wavelength range from 400 to 800.

Applicant's this particular argument is moot since none of applicant's claims 1 and 9-13 recites limitation of UV radiation source for photochemical reaction application with a wavelength range from 400 to 800. The argued limitation is not recited in claims 1 and 9-13. Furmidge et al ('665) and Ohyama ('576) disclose all structural limitations of applicant's claimed lamp.

Applicant's *claimed* halides of Mg are disclosed by Furmidge et al ('665), Ohmaya et al ('335) and Ohyama ('576).

In response to applicant's arguments about amount of Mg (at page 3 of his response filed on 03/19/2003), the Examiner withdraws prior art rejection of claims 3, 4, and 6 under 35 U.S.C. 102(b) and/or 103(a) (which was issued in paper no. 4, page 4, paragraph 6).

With respect to applicant's arguments at page 4, middle paragraph of his response filed on 03/19/2003, that Mg in Ohyama ('059)'s patent is not for visible light generation and has nothing to do with the lamp dimming.

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Applicant's this particular argument is not found persuasive. Ohyama ('059) discloses all structural limitations of applicant's claimed lamp.

The claimed limitation "superior dimming characteristics" is a functional limitation, which is narrative in form and does not carry any patentable weight. The term "superior" is also a relative term. The Examiner takes the position that prior art lamps are also superior lamps in terms of their operation.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 703-305-4934. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 703-305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7382 for regular communications and 703-308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.


Ashok Patel
Primary Examiner
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